AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/005,895 Filing Date: November 2, 2001

Title: HIERARCHICALLY ORTHOGONAL SWITCHING FABRIC

Assignee: Intel Corporation

REMARKS

No claims are amended, claims 14-41 are canceled, and claims 42-59 are added; as a result, claims 1-13 and 42-59 are now pending in this application.

Added Claims

Claims 42-59 are new. Support for the claims can be found generally in the specification. In particular, support for claims 42-52 can be found on page 11, line 8 through page 12, line 14 of the specification. Support for claims 52-59 can be found on page 6, line 9 through page 8, line 7, and on page 11, line 24 through page 12, line 14 of the specification. Claims 42-59 are drawn to systems and methods of multiple-domain processing and therefore pertain to the same invention as claims 1-13.

Affirmation of Election

Restriction to one of the claim groups was required as set forth in the Office Action:

Group I: Claims 1-13

Group II: Claims 14-22

Group III: Claims 23-30

Group IV: Claims 31-41

As provisionally elected by Applicant's representative, Chuck Steffey, on December 8, 2004, Applicant elects to prosecute the invention of claims 1-13. The claims of the non-elected invention or inventions, claims 14-41, are hereby canceled without prejudice. Further, Applicant reserves the right to later file continuations or divisions having claims directed to the non-elected inventions.

Objection to Specification

The disclosure is objected to because of informalities. Specifically, the Office Action requests a correction/clarification regarding the use of the term "3GIO" at page 3, line 16 of the specification. Applicant directs the Examiner's attention to page 1, lines 14-17 of the specification which states, "Most recently, switching fabric has been used as an interconnection means between the host and the end nodes of a processing domain. Some examples of switching

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fabric technologies that may be used include 3GIO, Rapid I/Otm, and HyperTransporttm."

Applicant submits that "3GIO" is clearly set forth in the patent specification so that the objection to the disclosure has been overcome, and withdrawal of the objection to the content of the specification is appropriate.

§112 Rejection of the Claims

Claims 14-22 and 31-41 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 14-22 and 31-41 are canceled, so the rejection is moot.

§102 Rejection of the Claims

Claims 1-8 and 10-13 were rejected under 35 U.S.C. § 102() [sic] as being anticipated by Walker *et al.* (U.S. 6,701,375). Applicant respectfully traverses the rejection of claims 1-8 and 10-13.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ 2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Applicant respectfully submits that the Office Action has failed to establish a *prima facie* case of anticipation in that Walker *et al.* does not teach each and every element of the claims as arranged in the claims.

For example, claim 1 recites, "a multi-dimensional switching fabric coupled to said first processing domain and said second processing domain to provide peer-to-peer packet communication within said processing system on multiple orthogonal planes, a first plane providing intra-domain packet communication and a second plane providing inter-domain packet

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communication." (emphasis added) In contrast, Walker et al., at column 2, lines 55-62 states, "the method of the invention comprises the steps of: using an <u>auxiliary communication channel</u> to establish switched virtual circuit between a first router associated with a first host and a second router associated with a second host; <u>transmitting data packets in both directions over the switched virtual circuit</u>; and deactivating the switched virtual circuit when packet transmission activity has ceased for a selected time." (emphasis added) Hence, Walker et al. fails to disclose "a multi-dimensional switching fabric" as recited in claim 1. Instead, Walker et al. discloses using a "switched virtual circuit" to transmit "data packets in both directions," and "deactivating the switched virtual circuit when packet transmission activity has ceased." Further, Walker et al. fails to disclose "communication within said processing system on multiple orthogonal planes" as recited in claim 1.

Thus, Walker et al. fails disclosure each of the elements of the claim 1. Therefore, the Office Action fails to establish a prima facie case of anticipation with regards to claim 1.

With respect to claims 2-13, Applicant submits that the claims are dependent on claim 1, and features of these claims in combination with claim 1 are not taught by Walker *et al*. Therefore, the Office Action fails to establish a *prima facie* case of anticipation with regards to claims 2-13.

For at least the reasons stated above, Applicant respectfully requests withdrawal of the §102 rejection and reconsideration and allowance of claims 1-13.

§ 103 Rejection of the Claims

Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Walker *et al.*, as in claim 1 above, in view of Nabkel *et al.* (U.S. 6,674,725). Applicant respectfully traverses the rejection of claim 9.

Claim 9 is ultimately dependent upon claim 1, and so claim 9 is patentable over Walker et al. for the same reasons as claim 1. Further, Nabkel et al. does not supply any elements missing from Walker et al. as to claim 1. Therefore, neither Walker et al. nor Nabkel et al., either alone or in combination, teach or suggest all of the elements of claim 9. Thus, the Office Action fails to state a prima facie case of obviousness with respect to claim 9.

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For at least the reasons stated above, Applicant respectfully requests withdrawal of the §103 rejection and reconsideration and allowance of claim 9.

Reservation of Rights

Applicant does not admit that references cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such references should not be construed as admissions that the references are prior art.

Documents Cited but Not Relied upon for this Office Action

Applicant need not respond to the assertion of pertinence stated for the references cited but not relied upon by the Office Action since these references are not made part of the rejections in this Office Action. Applicant is expressly not admitting to this assertion and reserves the right to address the assertion should it form part of future rejections.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6970 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

OLEG AWSIENKO ET AL.

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By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26th day of May, 2005.

Name

Date May 26, 2015

Signature